

Viking Installation Guide



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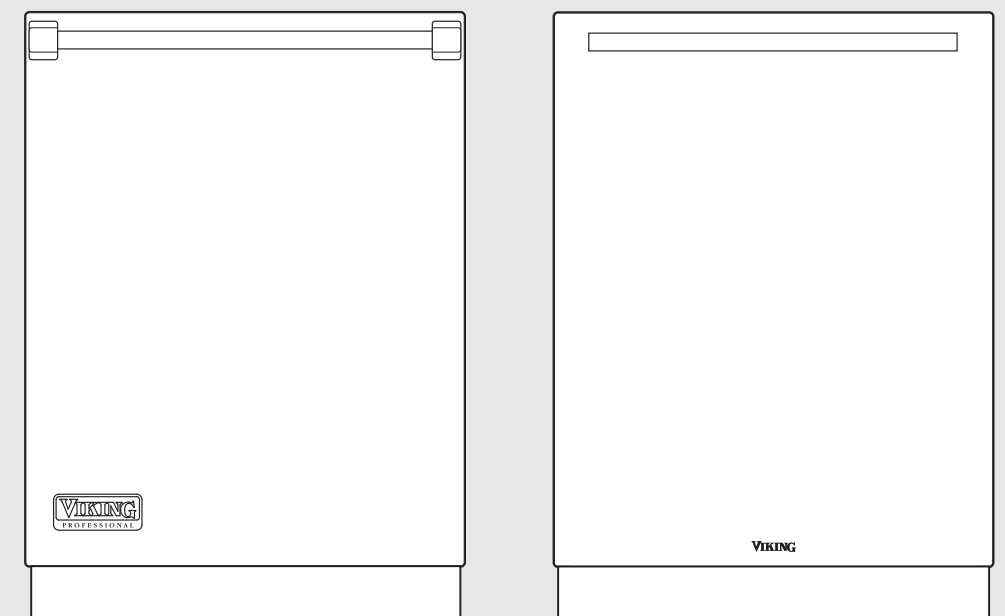
or visit the Viking Web site at

vikingrange.com



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(092308J)




Professional & Designer 450 Series
Built-In Dishwashers

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IMPORTANT—Please Read and Follow!

- Before beginning—please read these instructions completely and carefully.
- Do not remove permanently affixed labels, warnings, or rating plates from the dishwasher. This may void warranty or create an unsafe product.
- Please observe all national and local codes.
- Please ensure that this product is properly grounded.
- The installer should leave these instructions with the consumer who should retain for local inspector's use and for future reference.

 **WARNING**

Make sure that incoming voltage is the same as unit rating. An electric rating plate specifying voltage, hertz, and amps is attached to the product. Wiring the dishwasher with more voltage than it is rated for may cause severe damage. To reduce the risk of fire, electric shock, or injury to persons, installation work and electrical wiring must be done by qualified technician in accordance with all applicable codes and standards, including fire-rated conditions.

 **WARNING**


Electrical power must be turned off at circuit breaker or fuse box before making electrical connections. Disconnect the electrical power supply and place a tag at the disconnect switch indicating that you are working on the circuit.

 **WARNING**


Plumbing connections must comply with applicable sanitary, safety and plumbing codes.

 **WARNING**

The dishwasher door may not stay open by itself until the door panel is installed. Be aware of this when fastening the dishwasher to the cabinet.

 **CAUTION**

The dishwasher has a factory installed backflow preventer. Do Not add an additional check valve.

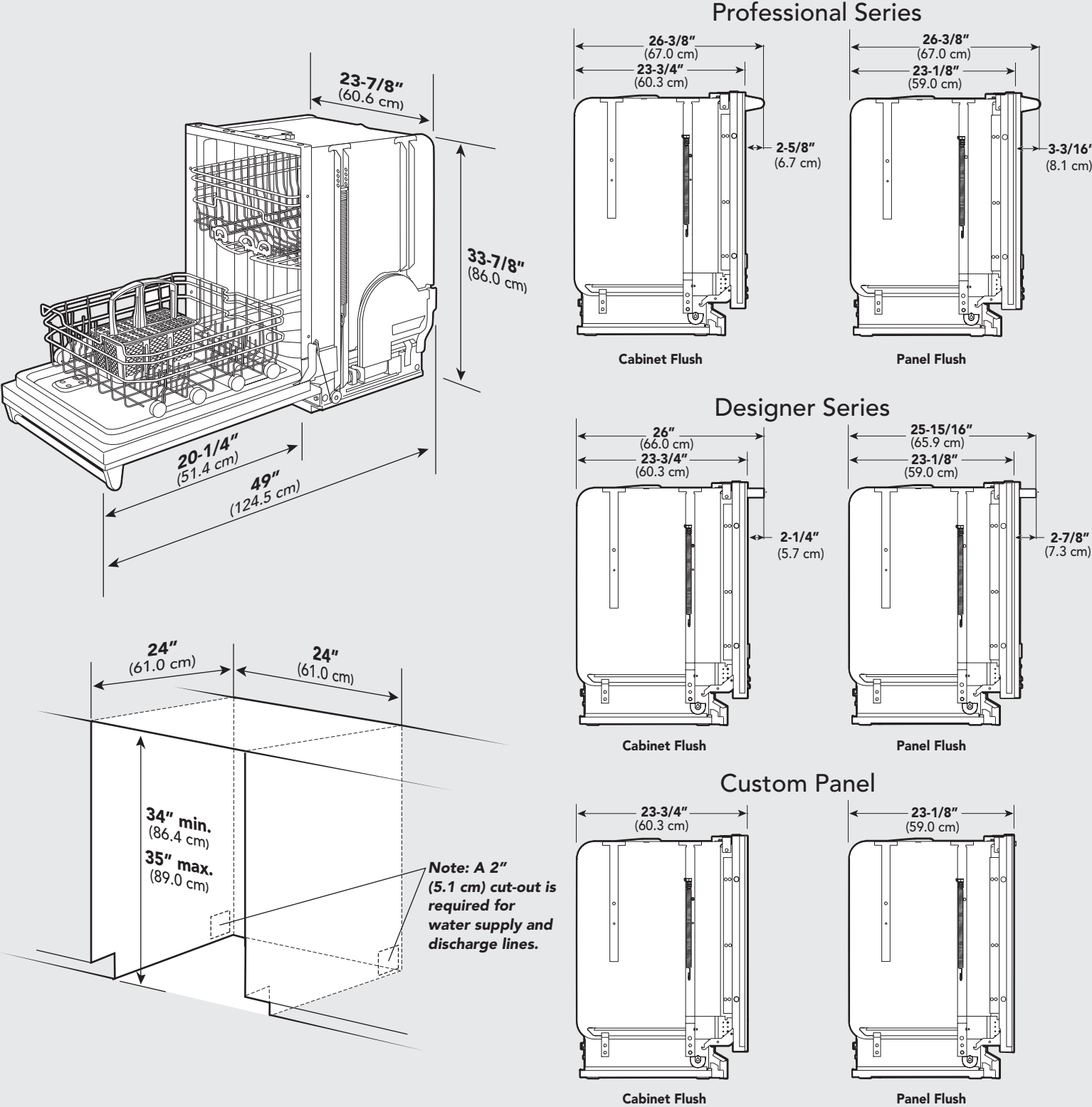
 **CAUTION**

Failure to provide (20" [50.8 cm] above floor level) a 20" (50.8 cm) high loop may result in improper operation of the dishwasher.

Site Preparation

It is recommended that a thorough site inspection be conducted PRIOR to unpacking and moving this appliance.

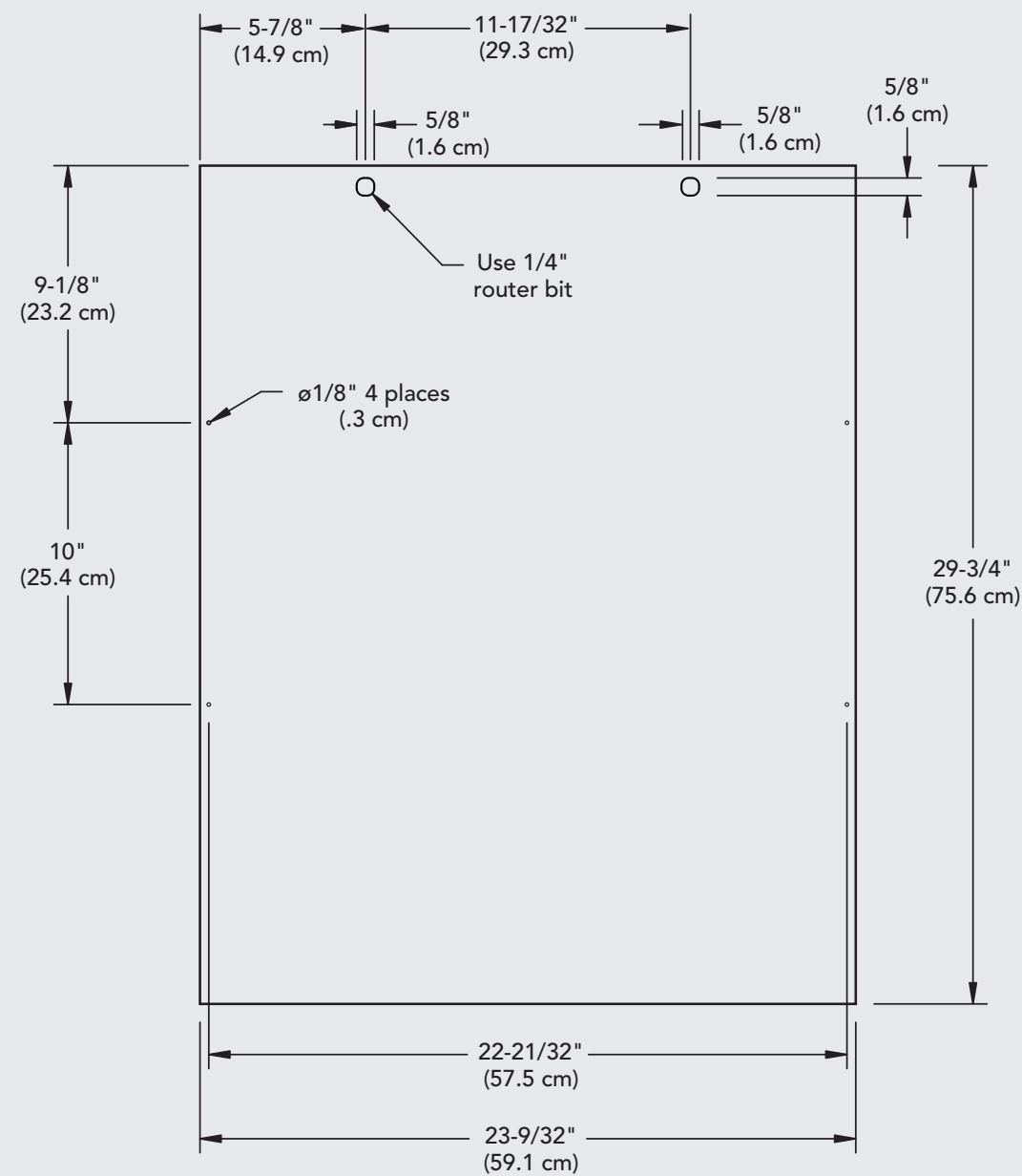
Dimensions & Cutout Dimensions



Specifications

Built-In Dishwasher	
Description	450 Model
Overall width	23-7/8" (60.6 cm)
Overall height from floor	33-7/8" (86.0 cm) min. 35" (89.0 cm) max.
Overall depth from rear-Professional	To edge of side - 24" (61.0 cm) - includes door panel With door open - 49" (124.5 cm)
Overall depth from rear-Designer	To edge of side - 24" (61.0 cm) - includes door panel With door open - 49" (124.5 cm)
Cutout width	24" (61.0 cm)
Cutout height	34" (86.4 cm) min. 35" (89.0 cm) max.
Cutout depth	24" (61.0 cm)
Electrical requirements	15.0 amps, 120VAC/60 Hz; 5' (1.8 m) electrical cord 3 prong plug supplied with unit
Water-heating element rating	1400 watts
Inlet water temperature	120°F (49°C) recommended; Dishwasher will perform properly with cold water <i>Note: Cycle times will vary</i>
Inlet water pressure operating range	10 to 125 psi (.69 to 8.62 bar)
Inlet water hose	5' (1.5 m) braided stainless steel water line with 3/8" (0.95 cm) compression fitting connected to dishwasher
Drain hose	7' (2.13 m) 1/2" (1.3 cm) ID "crimp-proof" flexible drain hose attached to dishwasher, connections provided for 5/8" (1.6 cm), 3/4" (1.9 cm) or 1" (2.5 cm), cut as required
Drain hose high loop required	Height from floor - 20" (51.0 cm) min.
Approximate shipping weight	157 lbs. (70.7 kg)

Custom Door Panel (Specifications)



NOTE: Back side of panel shown. Use caution not to drill through front of panel.

(Installation Option)

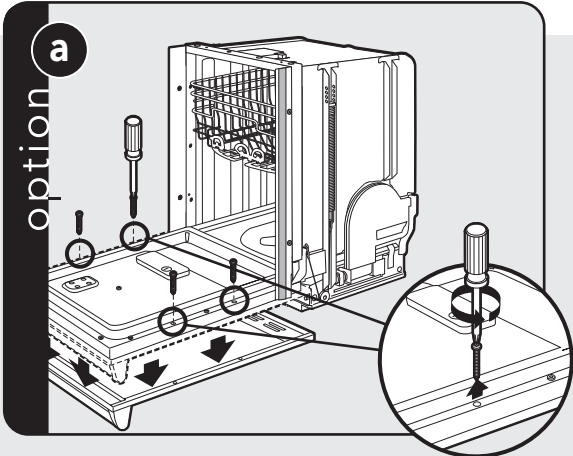
Have the overlay panel constructed per dimensions. The panel thickness MAY NOT exceed 5/8" (1.6 cm) for flush installation in most cabinets. Ensure that the design, construction, and installation of the panel overlay and its handle mounting is sufficient to reliably operate in this application with a maximum panel weight of 18 lbs. (8.2 kg.) Custom panels should not exceed 18 lbs. (8.2 kg.)

Obtain four screws with the proper thread type for the overlay material chosen. The screws MUST BE #8 flat head, 1-3/4" long and MUST BE stainless steel to avoid corrosion.

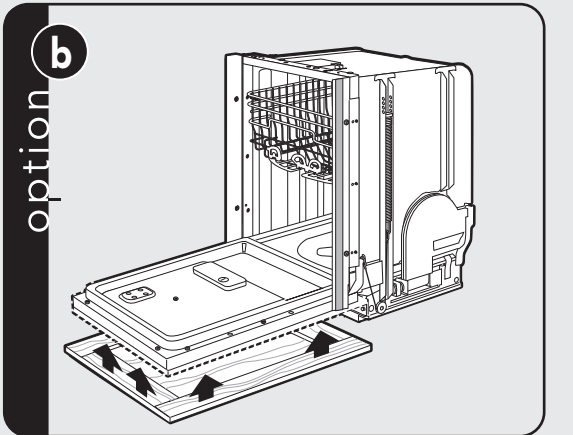
If dishwasher has a metal door skin installed, remove the four screws. DO NOT remove any other fasteners and ensure that only the proper screws are removed.

Carefully tighten each screw to secure the overlay and check to ensure that the overlay is square with the dishwasher door and cabinet opening and that the panel doesn't interfere with the operation of the dishwasher.

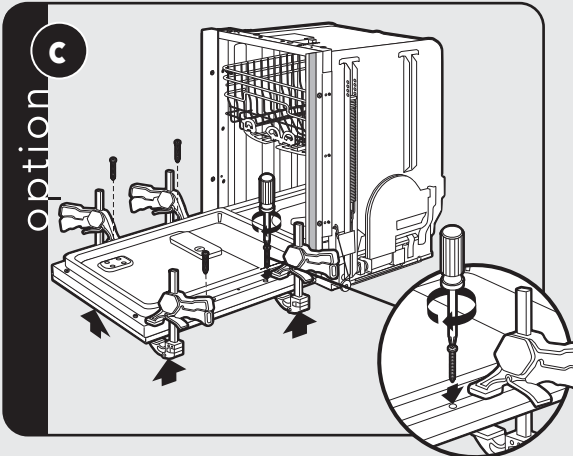
Verify operation of the door counter balance springs after installation of the overlay panel. The additional weight of the overlay panel might require an adjustment to the preload of the counterbalance springs. If adjustment of the springs is required, please refer to the "Counter Balance Spring" section.



To remove face panel of dishwasher remove only the 4 Phillips screws - do not remove any other fasteners.



Position custom face panel on front of dishwasher.



Use non-marring clamps to hold custom panel in place. Secure with #8 1-3/4" (4.5 cm) long, stainless steel flat head screws.

General Information

- Read these instructions carefully and completely before installing the dishwasher. The installation should be carried out by a qualified installer, who is familiar with all local codes and ordinances for electrical and plumbing connections. If the dishwasher is being installed for the first time, most of the work has to be done before you move it into place. If you are replacing an old dishwasher, you must check the old connections.
- Electrical requirements are listed in the “Specifications” section (page 5).

Site Preparation

NOTE: It is recommended that a thorough site inspection be conducted PRIOR to unpacking and moving this appliance.

- After determining where the water supply line will connect to the dishwasher, provide a 2” (5.1 cm) access hole and run the line to the approximate fill valve location. Sealing access area once lines are in place is recommended.
- Confirm available access to adequate power.

Water Supply

**WARNING**

Plumbing connections must comply with applicable sanitary, safety, and plumbing codes.

- Water pressure for the water supply should be a minimum of 10 to 125 psi. The dishwasher is supplied with a 5’ (1.5 m) braided stainless steel water line with 3/8” (0.95 cm) compression fitting connected to dishwasher.
- After determining where the water supply line will connect to the dishwasher, provide a 2” (5.1 cm) access hole and run the water supply line to the approximate fill valve location.

- For service convenience, a shut-off valve (not supplied) should be installed in the supply line in a readily accessible location (such as beneath the sink).
- It is recommended that the dishwasher be connected to a hot water supply. If a cold water supply is used, cycle times will vary.
- It is important that the water supply line and the shut-off valve have a sufficient flow volume. Flush the supply line prior to connecting it to the intake line of the dishwasher.
- Make sure the connection is sealed and not leaking before completing the installation.

Drain

- The access hole for the drain line should be 2” square (5.1 cm). Locate as low and as near to the back wall as possible.
- Do not use any fittings anywhere in the drain line that are less than 1/2” (1.3 cm) ID.
- If the drain line is going to be connected to a food waste disposer, be sure to remove the knockout or plug from the fitting before connecting drain line.
- Drain connection should be a minimum of 9” (22.9cm) from the floor. If connection is lower, siphoning during cycle can occur.

**CAUTION**

The dishwasher has a factory installed backflow preventer. Do Not add an additional check valve.

NOTE: The end of the drain hose is 1” (2.5 cm), but is adjustable to 3/4” (1.9 cm) or 5/8” (1.6 cm). If the drain connection is smaller than 1” (2.5 cm), the hose can be cut to fit the connection.

General Information

NOTE: Be sure to run the drain line through the hole to the sink compartment before moving the dishwasher into place.

Electrical Connections

This appliance must be grounded. In the event of a malfunction or breakdown, grounding will reduce the risk of electric shock by providing a path of least resistance for electric current. This appliance is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is installed and grounded in accordance with all local codes and ordinances.

**WARNING**

Disconnect the electrical power supply and place a tag at the disconnect switch indicating that you are working on the circuit.


Grounding Instructions if Hardwired:

This appliance must be connected to a grounded metal, permanent wiring system; or an equipment grounding conductor must be run with the circuit conductors and connected to the equipment – grounding terminal or lead on the appliance.


- For a cord connected undercounter dishwasher:
 1. The power supply receptacle for the appliance should be installed in a cabinet or on a wall adjacent to the under counter space in which the appliance is to be installed;
 2. There should be an opening through the partition between the compartments mentioned in Item (1), that is large enough for the attachment plug to pass through.

3. The edges of the opening mentioned in Item (2) should, if the partition is wood, be smooth and rounded or, if the partition is metal, be covered with the grommet provided for this purpose by the manufacturer; and
 4. Care should be exercised, when the appliance is installed or removed to reduce the likelihood of damage to the power supply cord.
- The dishwasher comes with a 5’ (1.8 m) electrical cord for 110-120 volts, 15/20 amp supply. This cord should be plugged into the 110-120 volt outlet located under the sink.
 - If the cord is not long enough or if a hard wire installation is needed, follow the instructions on page 10.

NOTE: Access holes should be 2” square (5.1 cm) with no sharp edges.

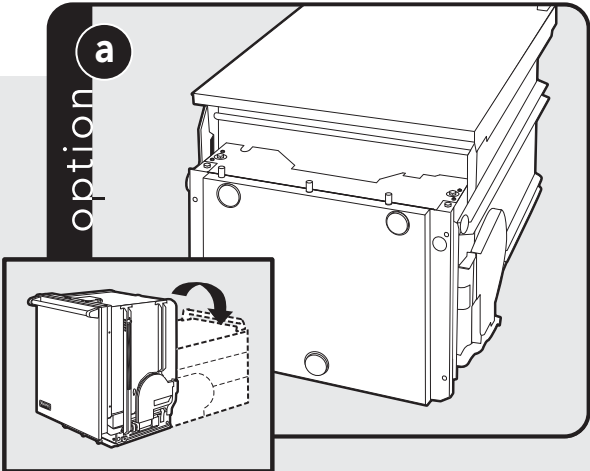
**WARNING**

Be sure electrical power is turned off at circuit breaker or fuse box before servicing or installing unit. Do not use an extension cord for this appliance.

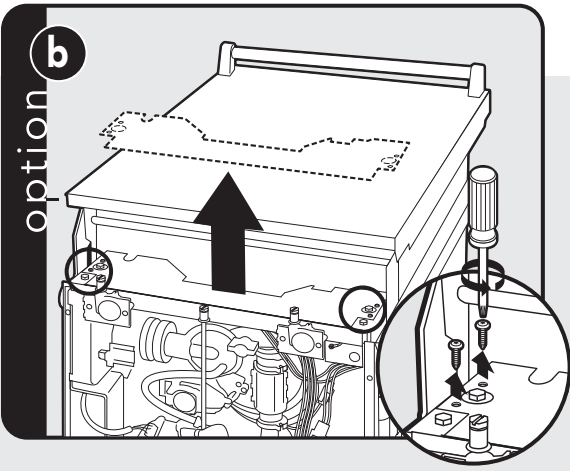
**WARNING**

Improper connection of the equipment – grounding conductor can result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the appliance is properly grounded. Do not modify the plug provided with the appliance; if it will not fit the outlet, have a proper outlet installed by a qualified electrician.

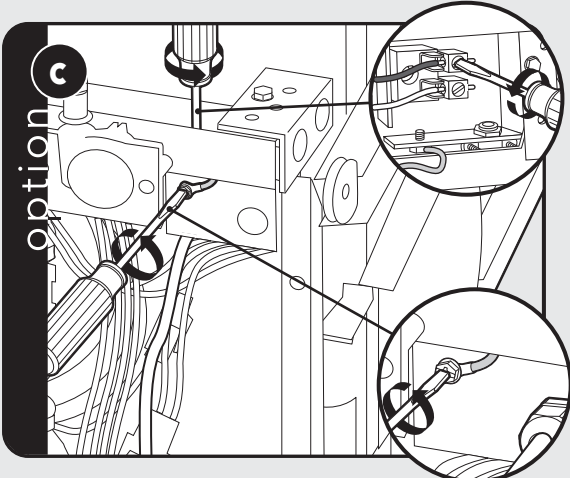
Hardwire Conduit Option



Remove any loose items in the dishwasher and carefully lay the dishwasher on its back. **NOTE:** Be careful not to pinch hoses or power cord beneath dishwasher.

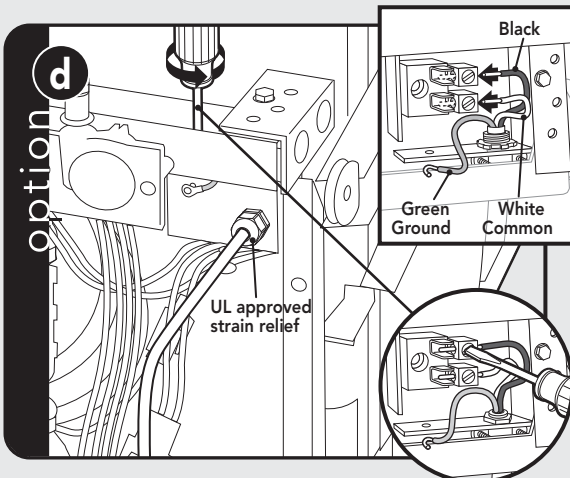


Remove bottom pan and front plate.

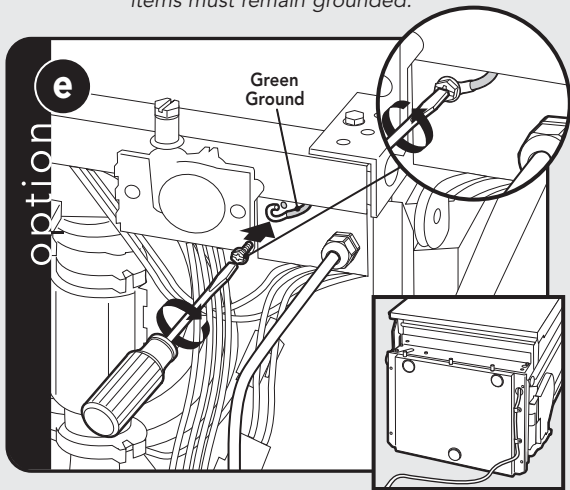


Loosen ground wire and wires on terminal block.
Loosen strain relief and remove cord.

NOTE: Other items are grounded in this location—these items must remain grounded.



Run wires through bottom pan. Using a UL approved strain relief, connect wires to terminal block.

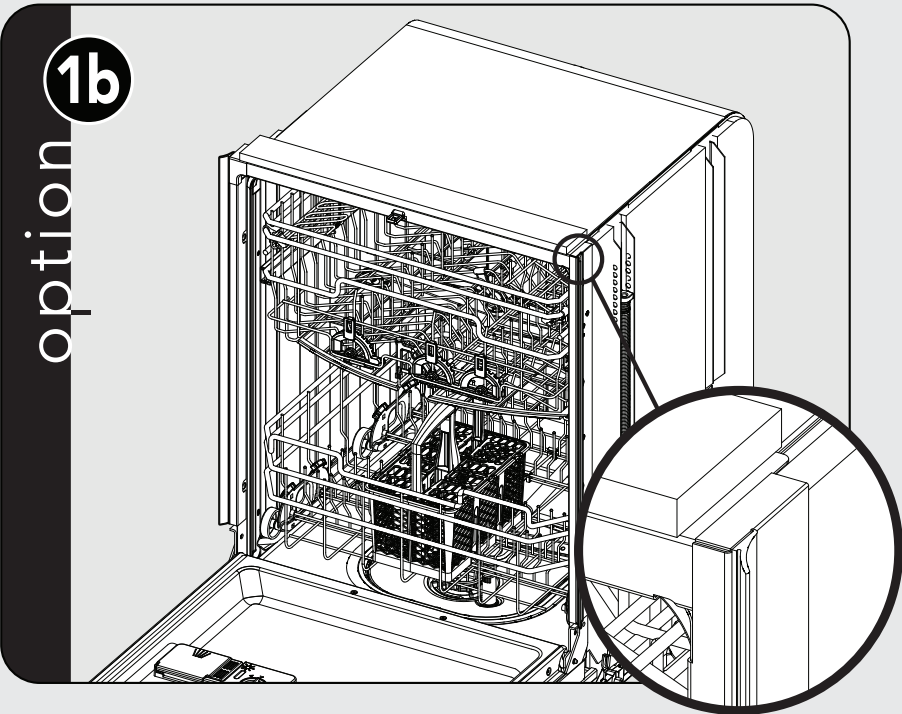
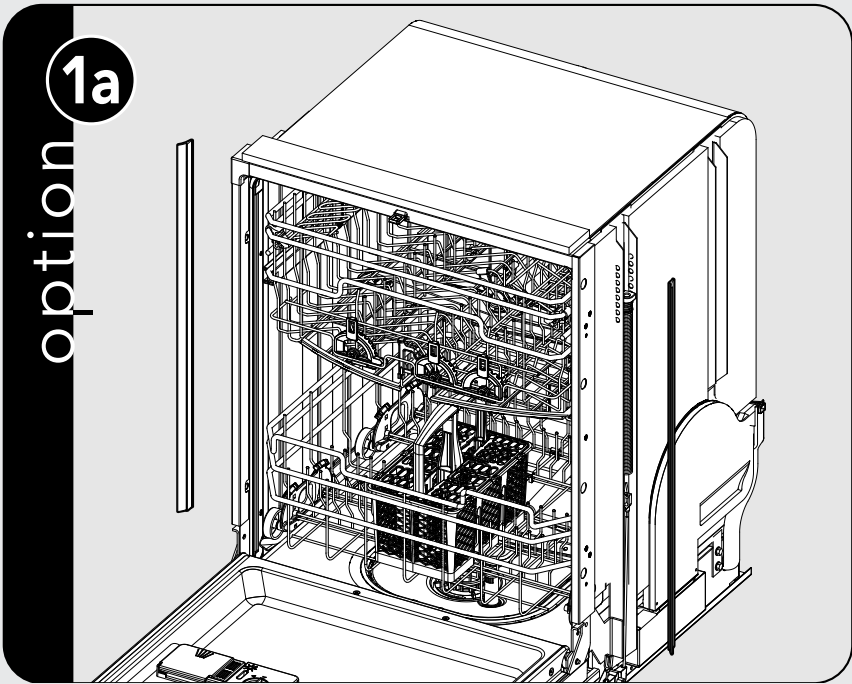


Connect ground wire.

NOTE: Reinstall front plate and bottom pan.

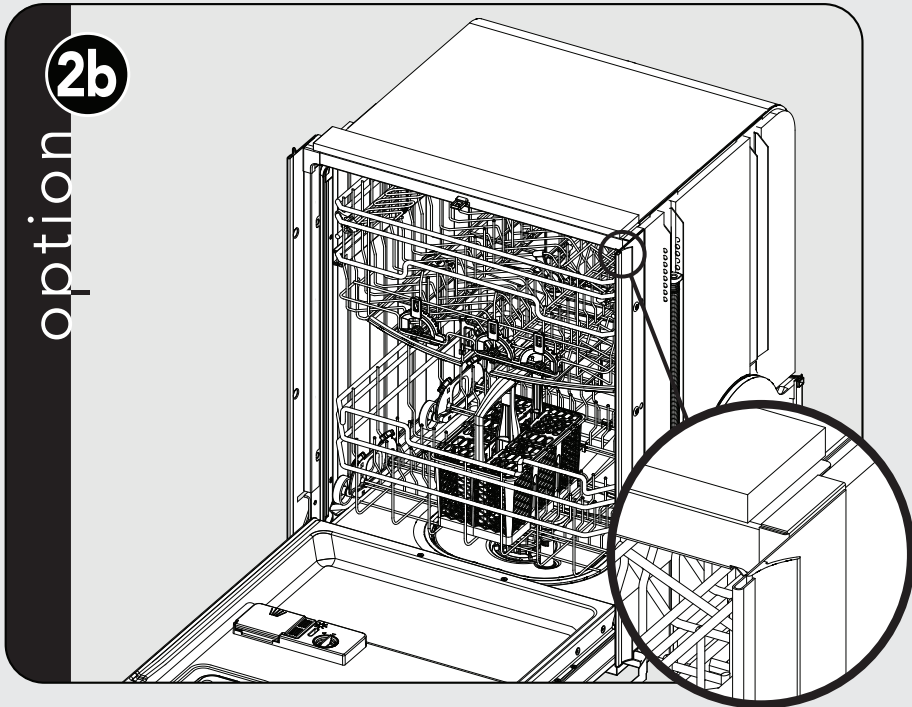
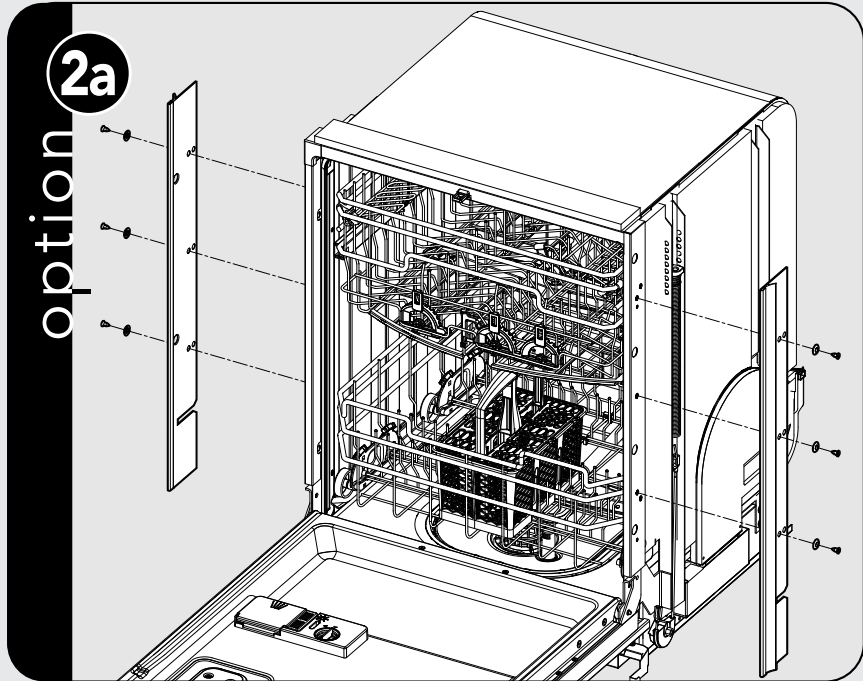
Trim Installation Options

To install dishwasher without trim, remove the 6 screws and washers (3 per side) and remove trim. To attach wiper gasket to dishwasher, pull protective film off adhesive back on wiper gaskets and apply to leading edge of dishwasher frame.



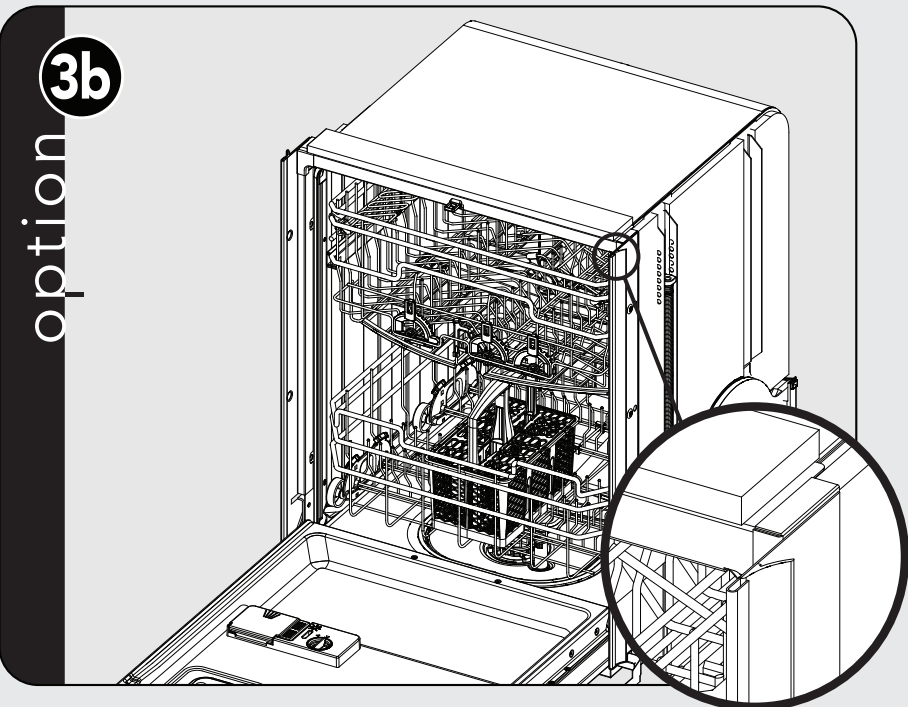
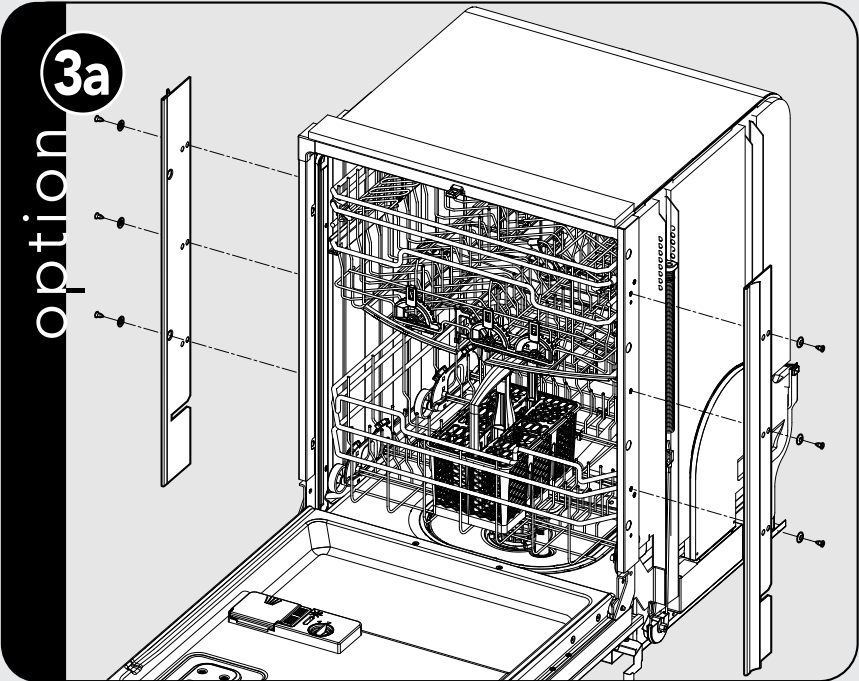
Trim Installation Options (cont'd.)

Dishwasher will ship with trim installed for panel flush install. If needed, attach wiper gasket by pulling protective film off adhesive back on wiper gasket and apply behind hemmed edge of side trim.

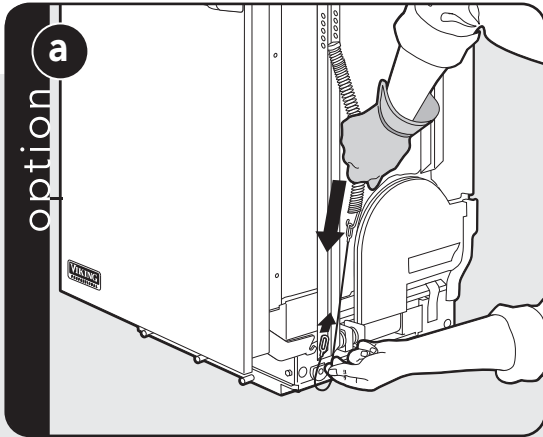


Trim Installation Options (cont'd.)

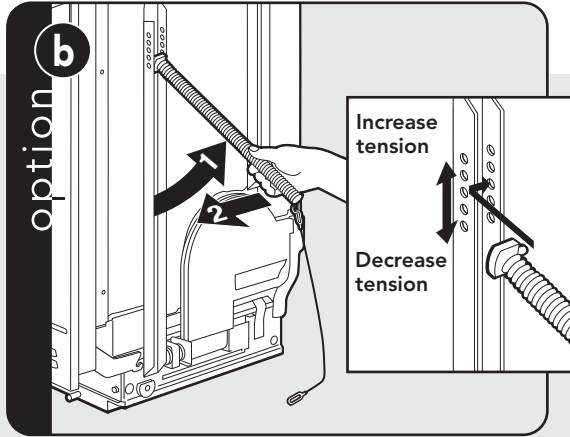
To install dishwasher cabinet flush with trim, remove the 6 screws and washers (3 per side) holding side trim on. Shift the side trim forward. Use rear hole on side trim and the same hole on dishwasher to reattach trim. If needed, attach wiper gasket by pulling protective film off adhesive back on wiper gasket and apply behind hemmed edge of side trim.



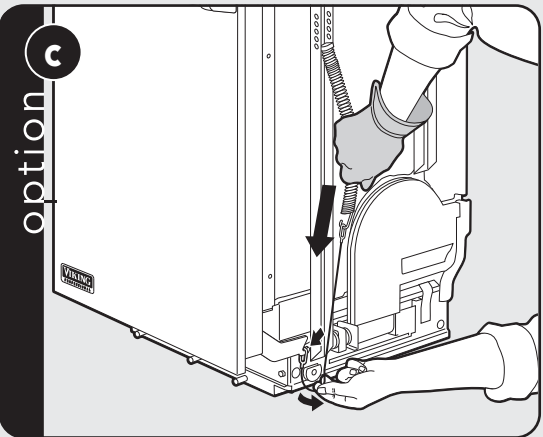
Counter Balance Spring Adjustment - If Necessary



Disconnect cable from hook.



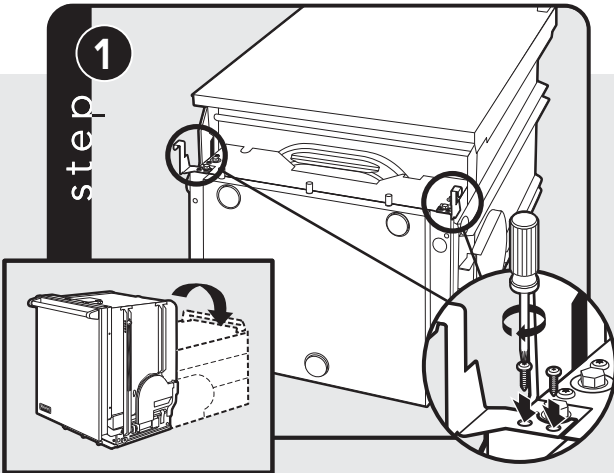
Set counter balance spring connector in appropriate location.



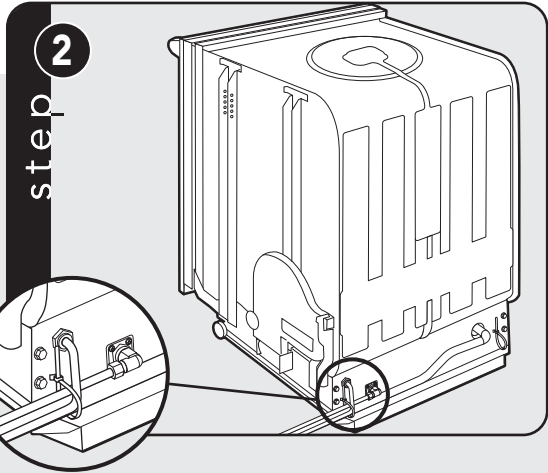
Reconnect cable to hook.

NOTE: For custom panel installation the door may require adjustment to the preload of the counterbalance springs. Follow these steps to adjust the tension.

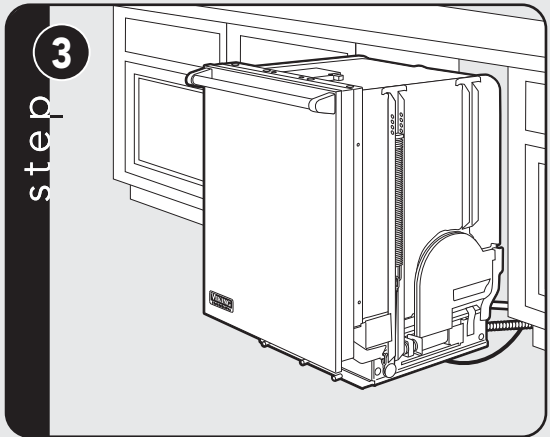
Installation Procedure



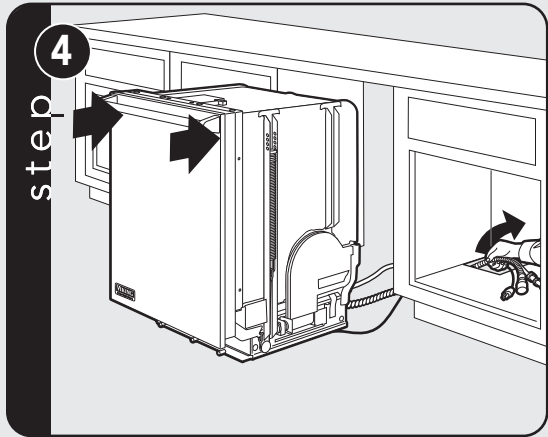
Carefully lay dishwasher on its back and attach the kick plate brackets. Screws for the brackets will already be in the base. **NOTE:** Be careful not to pinch hoses or power cord beneath dishwasher.



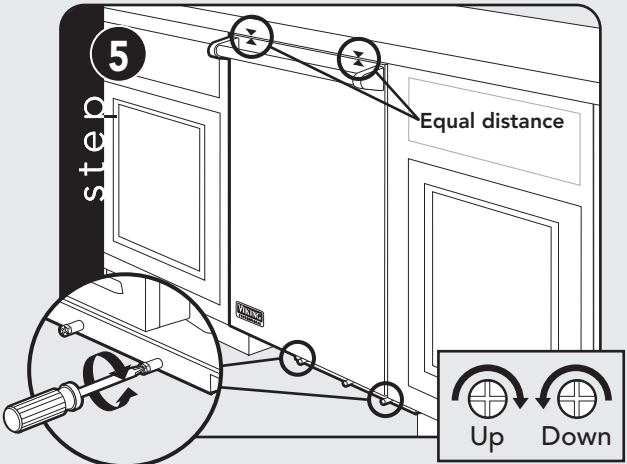
Using tie strap attached to dishwasher, band water line, drain line, and power cord together.



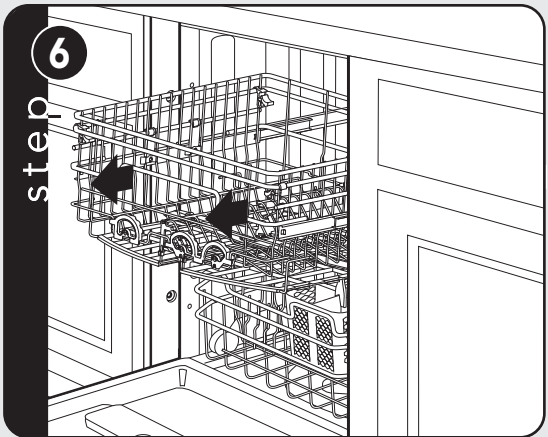
Position unit in front of cutout.



Slide unit into opening; be sure to feed water, electrical and discharge lines into adjacent cabinet.

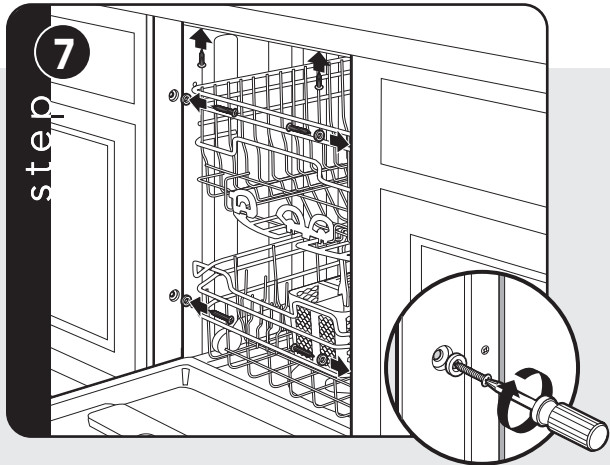


Using a level, adjust to appropriate height. Left and right adjust side to side and center adjusts front to back.

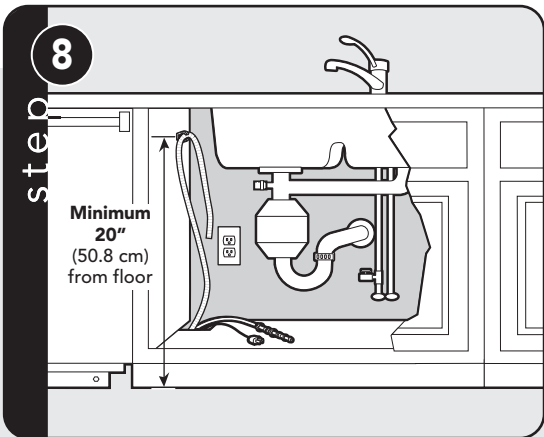


To check level, front to back, pull the top rack half-way out of unit. The rack should remain stationary and not move in or out.

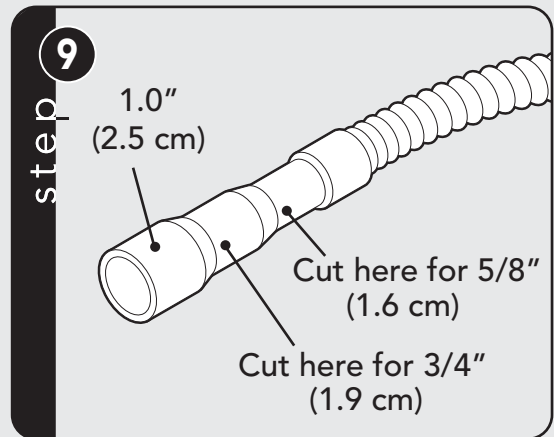
Installation Procedure (cont'd.)



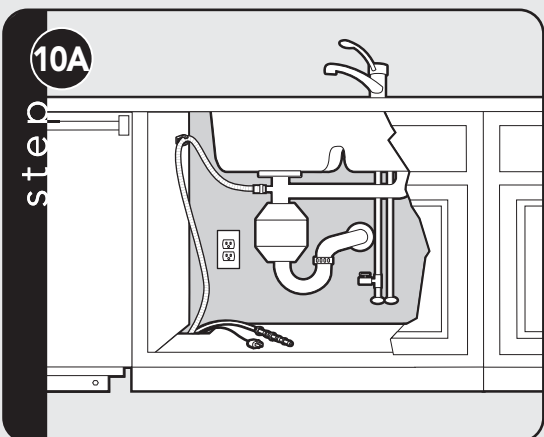
Attach screws through trim pieces into cabinets.



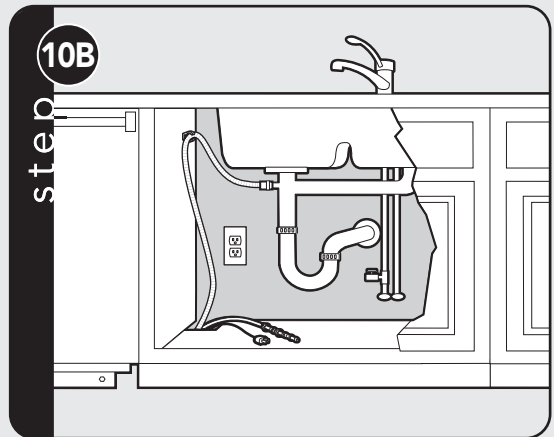
Install High Loop Clip, which is provided, a minimum of 20" (50.8 cm) from the floor.



Identify discharge connection size; cut line to correct size and connect. Clamp if necessary.

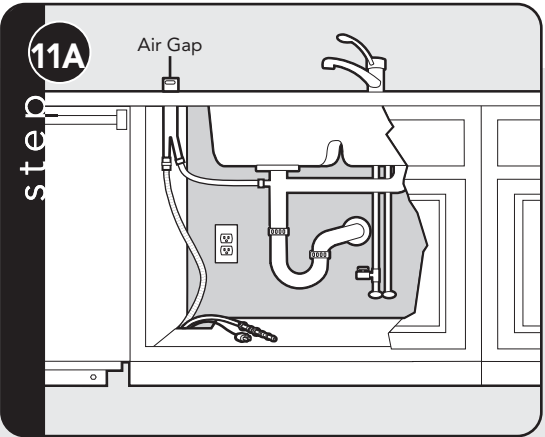


(Discharge with food waste disposer)

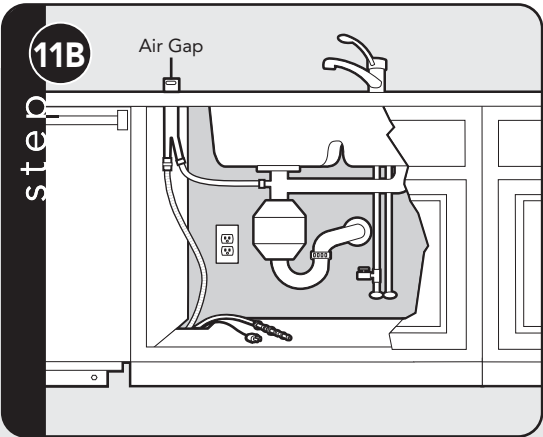


(Standard discharge)

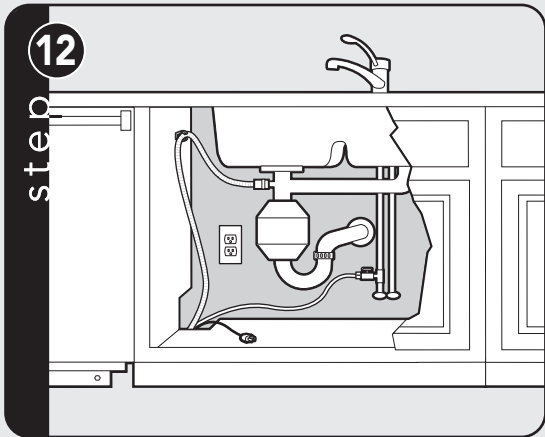
Installation Procedure (cont'd.)



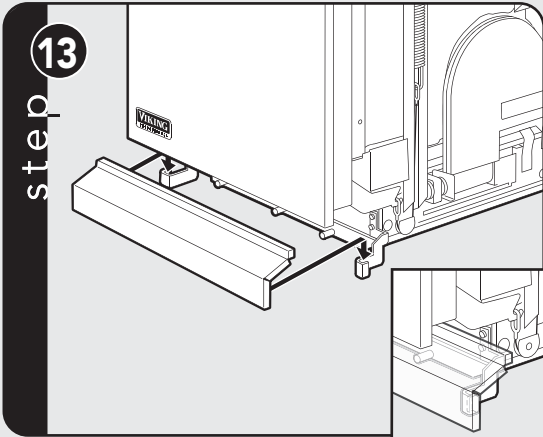
(Discharge with air gap)



(Discharge with food waste disposer and air gap)



Connect water line.



Plug LED light into dishwasher and install kick plate.

Performance Checklist

Testing for Leaks

- Remove packaging and parts.
- Turn on the water supply and check for leaks.
- Turn the power on at breaker/fuse box and test the dishwasher operation by running a rinse and hold cycle. (This should take about 12 minutes.)
- Turn off the electrical power and check for leaks under the dishwasher.
- Make sure that no kinks have developed in the drain lines.

Final Preparation

- Some stainless steel parts may have a plastic protective wrap which must be peeled off.

Unit Reset

- If the unit should need to be reset for any reason, push and hold the “START” button for 4 seconds.



Service & Registration

Only authorized replacement parts may be used in performing service on the dishwasher. Do not repair or replace any part of the appliance unless specifically recommended in the manual. All other servicing should be referred to a qualified authorized technician.

Record the following information. You will need it if service is ever required. The serial number and model number for your dishwasher are located on the identification plate mounted on the bottom left side of the dishwasher door opening.

Model number

Serial number

Date of purchase

Date installed

Dealer's name

Phone number
